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ABSTRACT

School culture has recently emerged as a framework for the study and interpretation of the structure and development of schools. A work culture productivity model is described, and the development of a culture instrument is reported. The concept of school work culture, a subset of systems culture, refers to the collective work patterns of a system. The School Work Culture Profile (SWCP) was designed to obtain a quantitative measure of a school's (or system's) work patterns. The SWCP was developed using primary and second-order principal components analysis. It is a staff perceptions survey, on which school work culture is operationalized with 60 statements pertaining to existing work practices in a school organization. A 5-point Likert scale is used to rate each item in the following 4 subscales with 15 items each: (1) planning; (2) staff development; (3) program development; and (4) school assessment. The SWCP was administered to 416 subjects from 100 Florida elementary schools. The ratio of teachers to principals in the sample was approximately three to one. The Statistical Analysis System principal components program was used to examine the factorial validity of the questions. This second-order factor analysis helps clarify a strategy for school production. Three tables present data from the study, and an appendix contains the school work culture profile. (SLD)

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THE SCHOOL WORK CULTURE PROFILE: A STATISTICAL ANALYSIS AND STRATEGY

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ABSTRACT

School culture has recently emerged as a framework for the study and interpretation of the structure and development of schools. This paper reviews a work culture productivity model and reports the development of a culture instrument. The use of second-order component analysis shows areas of generalization across primary factors.

The School Work Culture Profile: A Statistical Analysis and Strategy

School culture has recently emerged as a framework for the study and interpretation of the structure and development of schools (Deal & Kennedy, 1983; Snyder & Anderson, 1986; Rossman, Corbett, & Firestone, 1988; Deal, 1990; Brandt, 1990; Greene, 1991). Culture has been defined as an understanding of "the way we do things around here" and is characterized by shared beliefs and visions, rituals and ceremonies, and networks of communication (Deal & Kennedy, 1983, p. 14). Researchers in organizational development have sought to observe, describe, and understand the existing cultures of schools and link the same with the productivity of an organization. Some have stated that the effect of culture on productivity is so powerful that developing a culture that supports school effectiveness is essential to school success (Deal, 1987). Thus, reform efforts in many schools and systems have focused on bringing about changes in existing school cultures (Goldman & O'Shea, 1990; Miles & Louis, 1990).

Studies of organizational culture have used both qualitative and ethnographic approaches, as well as quantitative approaches. The School Work Culture Profile (SWCP) was designed to obtain a quantitative measure of a school's (or system's) work patterns. Rooted in the concept of systems culture, the construct of school work culture is described as a subset of the same. Specifically, it refers to the collective work patterns of a system (or school) in the areas of systemwide/schoolwide panning, staff development, program development, and assessment of productivity, as perceived by its staff members (Snyder, 1988). The instrument is based on the generalization derived from the literature that schools can have a culture that either supports or hinders educational excellence and productivity

and that positive school culture is associated with effective schools (Sweeney, 1987; Deal, 1987; Sergiovanni, 1987).

The purpose of the study was to use primary and second-order principal components analyses to develop a valid instrument to assess work culture. A second-order factor analysis will incorporate an additional level of analysis by showing how the first order factors group into higher order factors. This is important in assessing the global components of work culture.

Managing Productive Schools

During the past decade, Snyder and Anderson (Snyder & Anderson, 1986; Snyder, 1988) implemented a leadership training program known as Managing Productive Schools (MPS) in Florida, Minnesota, and Virginia. The program is based on the research base noted above and also on a systems approach to organizational development. That is, all dimensions of the organization are viewed as interdependent features to enable the system to achieve its purposes an goals.

The model assumes that a vision of a great school shared by all members is the basis of transformation. In addition, a school enhancement plan which becomes a focus for work activity is designed each year. A rich array of professional development opportunities that center around enhancement goals is provided for staff at all levels. The central thrust of school enhancement is to align the instructional program to address the needs of various student populations.

Allocating resources where needs are the greatest creates natural new structures for work and learning. Resources, information and opportunity are fundamental materials for

organizational productivity (Johnson, Snyder, & Johnson, 1991). Progress with goals is assessed routinely to provide feedback and feed-forward information concerning desired future performance. These actions keep the school on course.

The School Work Culture Profile

The SWCP is a staff perceptions survey. School work culture is operationalized on the SWCP with 60 statements pertaining to existing work practices in a school organization. A five-point Likert scale ranging from Strongly Disagree to Strongly Agree, with a midpoint of Undecided, was used to rate each item. The statements were organized under four subscales of the School Management Productivity Model developed by Snyder and Anderson (1986): Planning (P), Staff Development (SD), Program Development (PD), and Assessment (A). The 60 items represented four subscales of 15 items each. The items were presented in random order without reference to subscale identity. Following is a brief review of the productivity model.

Dimension 1: School-wide Planning. Managers and workers together transform common concerns into specific achievement-oriented development goals. Planning tasks include setting organizational goals that relate to primary outcomes and visions for the organization (Conley, Schmidel, & Shedd, 1988; Davidson & Montgomery, 1985). Tasks are dispersed to permanent and ad hoc work groups that work collaboratively, forming and reforming as needs are addressed (Cook, 1982; Deal & Kennedy, 1982). Individuals are held accountable for their contributions within multiple small work units (Drucker, 1982; Levine, 1986). Peters and Austin (1985) found that the intensity of managements's commitment to organizational goals is the chief difference between great and not-so-great organizations.

Dimension 2: Professional Development. Professional development plans that are linked to organizational goals have the power to enhance individual and group performance (Carnevale, 1989; Glenn, 1981). Managers and workers regularly coach each other as they develop new skills and solve problems (Garmston 1987). Work groups become learning centers for teachers as they share, plan, act, and critique programs or tasks together (Larson & La Fasto, 1989; Little, 1982). Collaborative quality control systems are replacing outdated monitoring systems and provide for regular group reflection, data analysis, and problem solving as the organization works on its plans (Peters & Waterman, 1982). Quality control in the best institutions today is viewed as developmental and provides opportunities for work adjustment in fast paced and turbulent environments (NASSP, 1979; Wise & Darling-Hammond, 1984).

Dimension 3: Program Development. Principals and supervisors convey instructional standards to teachers in productive schools (Coulson, 1977). They also coordinate program development, implementation, and testing activity to address learning challenges (Vanesky & Winfield, 1979). It is also well documented that high levels of parent and community involvement facilitate student success patterns (Gordon, 1979).

Dimension 4: School Assessment. Accountability systems drive assessment activity in productive organizations (Brookover & Lezotte, 1979). The only assessment that appears to have the power to alter individual and organizational performance is a goal-based system (Odiorne, 1979). Assessment data in productive organizations provide both a feedback and a feed-forward loop that influence both short- and long-range planning (Michael, Luthans, Warner, & Hayden, 1981).

The latter model was based on an in-depth study of the literature on productive organizations and work cultures in business and education. Over 400 studies were reviewed. Included within the four subscales are ten smaller logical clusters (dimensions): goal setting, work group performance, individual staff performance, staff development, clinical supervision, work group development, instructional program development, resources development, quality control, and assessment. The items on the SWCP have been through face validation with respect to logical relevance of subscale and clarity using local and national panels of judges.

Method

The total sample of subjects (n=416) were from 100 Florida elementary schools representing 40 of the 67 school districts in Florida. The ratio of elementary teachers to principals was approximately three to one. Each subject in the sample was sent an SWCP questionnaire with directions and a machine-scorable answer sheet. The data were collected by mail.

The initial request for what now is called the School Work Culture Profile came from Superintendents in Prince George, British Columbia region in 1985. The occasion was a workshop, designed for superintendents who wanted to develop and coach their principals.

After examining the research base for the MPS Model, and discussing the resulting ten MPS competencies and subset skills, the superintendents were asked how principals might use the MPS knowledge base to work with their staffs. A discussion evolved around the translation of the 100 subset skills, from the ten competencies, into a school diagnostic instrument. Interest centered on helping principals find out what their staff perceptions

were about the school's work patterns. They anticipated that the 100 research based subset skills provided a defensible basis for teacher's feedback on the school's work culture. It was perceived that principals could use the feedback from administering the instrument as a guide in planning for school development. That night a draft instrument concept and item bank was designed and shared the next morning with the superintendents. Their feedback provided encouragement for further development.

An initial 100 item scale was then created and piloted in workshops with principals over the next year. Feedback from each administration of A Perception Profile: My School's Work Culture guided the refinements of the item bank and instrument design. In 1984, the revised instrument was field-tested in Sarasota County, Missouri, Maryland, and Hillsborough and Pasco Counties in Florida.

Pasco County school officials engaged in a multi-level refinement of the instrument, in order to modify the language for greater clarity among teachers. Pasco County school officials saw potential value in the instrument as a district wide data gathering tool.

In 1987, the Pasco County School District received a grant from the Florida Council on Educational Management to become one of three state pilot sites to develop Level III Principalship Certification Programs. A Level III Program would be designed to measure the extent principals used the knowledge base and skills taught in their Level II Management Development Program to solve schooling problems over time. Since the MPS Model and training program were the core of the District's Level II program, it was decided that A Perception Profile: My School's Work Profile might provide one measure of a potential

Level III school. At this point the instrument had not undergone the rigors of reliability and validation studies.

The instrument A Perception Profile: My School's Work Profile was edited and reorganized to create an instrument suitable for research. Introductory paragraphs explaining the concepts were deleted, the fifty items were edited for language clarity, and several items were split into two items. The resulting pool of sixty-five items was randomized, and all references to the four subtest constructs were removed. Directions were written to allow for the use of a machine scorable answer sheet. In addition, the test was renamed the School Culture Profile.

This early edition of the SCP was submitted to reliability testing in the summer of 1987. A sample of forty-six elementary school teachers in Pasco County responded to the items. The Cronbach alphas on the instrument were strong indicators of reliability. Several items were dropped or modified, and one subset of statements was moved from the staff development subscale to the assessment subscale. These refinements resulted in alpha reliability scores of .82 to .85 on the fours subscales and a composite scale alpha of .95.

The refined edition of the SCP, renamed the SWCP was tested using two different reliability samples. Two classes of graduate students in education, n=46, took the SWCP in the fall of 1987. Alphas for the four subscales were between .88 and .93 and .97 for the total scale. A second sample of fifty elementary school teachers in Lee County participated in a test-retest study with a two week delay time in the spring of 1988. A test-retest Pearson correlation coefficient of .78 was attained.

To investigate content validity, the sixty-two item edition of the SWCP was mailed to a panel of seventeen experts in the field. Fifteen members of this nationwide panel returned an eleven page questionnaire on the language clarity and the item relevance of the SWCP items. A six-point Likert rating scale was used for both the language clarity scale and the item relevance scale. A rating of six was awarded an item judged to be very clear (language clarity scale) or very relevant (item relevance scale). The panel's responses were carefully analyzed both numerically and for item revision suggestions. Item means were calculated for the four subscales and for the total scale. In language clarity, the subscale means ranged from 5.32 to 5.64; the total scale mean equaled 5.45 to 5.72; the total scale mean equaled 5.53. Six items were deleted, four new items were written, and the language of many items was revised.

A second content validity survey containing the revised edition of the SWCP was mailed to a panel of seventeen reviewers. Fourteen members of this panel were on the earlier panel. Two early panel members who had not responded and one panel member who requested to be eliminated were dropped from the second panel. Of the second panel, eleven members responded to an eighteen page questionnaire. The analysis of their responses led to the current selection of the School Work Culture Profile items.

Results

We used the SAS principal components program (SAS Institute, Inc., 1986) to examine the factorial validity of the questions because: (a) it is a psychometrically sound approach, (b) it is simpler mathematically, relatively speaking, than factor analysis, and (c)

the factor indeterminacy issue associated with common factor analysis (Steiger, 1979) is still a troublesome feature (Stevens, 1986).

A relevant question pertaining to performing a principal components analysis is if different factors will emerge if 1.00s are put in the main diagonal than if communalities are used. Gorsuch (1983) noted when there were a large number of variables having moderate communalities, the differences were negligible. This constitutes the justification for performing a principal components analysis here.

Determining the number of factors to extract from the correlation matrix is a fundamental decision in any analysis (Thompson & Borrello, 1986). Many researchers follow the recommendations of Kaiser (1960) and extract factors with eigenvalues greater than one. The Kaiser criterion has been shown to be quite accurate when the number of subjects is greater than 250 and the mean communality is greater than or equal to 0.60. Both conditions were met for this study. We applied the eigenvalue criterion in our decision on factor extraction. Individual questions were retained if they had a factor loading greater than or equal to 0.30. The first order principal components analysis yielded twelve factors. The prerotation eigenvalues for the components were 19.4, 2.49, 1.94, 1.67, 1.64, 1.47, 1.30, 1.29, 1.26, 1.18, 1.09, and 1.04. See Table 1 for a listing of the item means and standard deviations for the group data. The means varied from 2.76 to 4.37, while the standard deviations were about one for most items.

One result of the first-order principal components analysis was matrix of correlations among the factors. The interfactor correlation matrix can be factored just as the 60 x 60 variable matrix can be. This method is called second-order factor analysis. Kerlinger (1984),

Thompson and Borrello (1986), and Thompson and Miller (1981) presented examples illustrating the procedures for second-order factor analysis.

The decision to extract second-order factors was driven by the finding that the first-order varimax solution involved numerous multiple loadings, suggesting a first-order oblique solution as well as a second-order result. An approximate check as to whether a loading is statistically significant can be obtained by doubling the standard error, i.e., doubling the critical value required for significance for an ordinary correlation. The statistically significant value for a sample size of 416 is approximately 0.26 (Stevens, 1986). Since this number is a minimum, the actual value may be increased. Very often in research, the value is set at 0.3 in absolute magnitude. See Table 2 for the first-order varimax rotated factor pattern matrix.

Four second-order factors were extracted from the interfactor correlation matrix and rotated to the varimax criterion. Second-order factors such as these are then often interpreted. However, Gorsuch (1983), argued that this is not desirable:

> Interpretations of the second-order factors would need to be based upon the interpretations variables. Whereas, it is hoped that the investigator knows the variables well enough to interpret them, the accuracy of interpretation will decrease with the first-order factors, will be less with the second-order factors, and still less with the third-order factors. To avoid basing interpretations upon interpretations of interpretations, the relationships of the original variables to each level of the higher-order factors are determined (p. 245).

The first-order promax rotated factors, therefore, were postmultiplied by the second-order varimax rotated factors, and the product matrix were then rotated to the varimax criterion. The decision at any stage for orthogonal rotation terminates the higher-order

factor sequence (Loehlin, 1992). Table 3 presents these factor pattern coefficients for items that had coefficients greater than $|0.3|$.

We used the generalized Kuder-Richardson reliability formula, coefficient alpha (Cronbach, 1951; Ebel, 1965; Novick & Lewis, 1967), to evaluate the reliability of the instrument. This formula was appropriate since a scale in Likert format was employed. The Cronbach alphas for the factors (subscales) follow: subscale one .92, subscale two .86, subscale three .76, subscale four .68, and the composite for all questions .95.

The subscale intercorrelations for the subscales follow: (a) Factors one and two .76, (b) Factors one and three .75, (c) Factors one and four .71, (d) Factors two and three .65, (e) Factors two and four .63, and (f) Factors three and four .62. These intercorrelations do not represent factor scores but subscale scores derived by summing the response category values for the salient items for a subscale.

Discussion

As a direct outcome of the literature-research base, following are the ten smaller dimensions of the work culture productivity model. The implementation of this model constitutes a school production strategy.

School-Wide Planning

1. Goal Setting: Establish annual school development goals through administrative assessment and selection and also through total staff collaborative decision making.

2. Work Group Performance: Designate school work groups, both teaching teams or department and task forces, to which are assigned school goal objectives and action planning responsibilities.

3. Individual Staff Performance: Establish and operationalize a teacher performance system that includes performance standards, individual goal setting and action planning procedures, performance ,monitoring, due process procedures, and evaluation.

Staff Development

4. Staff Development: Develop and operationalize a school program for staff growth that emphasizes new knowledge and skills that are necessary for successful attainment of school development goals (school, work, individual).

5. Clinical Supervision: Develop and operationalize a peer and supervisory clinical supervision program for all teachers and teams, where performance feedback and correctives are provided weekly.

6. Work Group Development: Establish a healthy work climate and develop work group skills in action planning, creative and productive group communications, problem solving, and decision making. (This competency area resulted from our research analysis.)

Program Development

7. Instructional Program: Establish and operationalize an instructional program that reflects up-to-date research on teaching and learning, and guides the teaching improvement efforts in the following areas: curriculum

implementation, student diagnosis and placement, program planning, classroom management, teaching, and learning.

8. Resources Development: Facilitate staff productivity in work groups and provide necessary resources for making the school an increasingly productive unit.

Assessment

9. Quality Control: Establish and operationalize a quality control system for work groups and individuals which includes goal-based observations, conferencing, periodic progress reports and plans, and conferencing and supervisory plans.

10. Assessment: Establish and operationalize a set of school evaluation procedures to assess student achievement gains, teaching team and task force productivity, individual teacher performance, and total school productivity.

Pertaining to the results of the second order analysis, factor one focuses on partnership goals among staff, parents, students, and community and data bases that guide school planning and work group efforts. The factor is a planning cluster.

Factor two pertains to the staff working cooperatively in planning, organization, coaching, and problem solving using multiple resources. The factor is a "staff working" planning cluster.

Factor three focuses on staff accountability to insure student success through instructional programs and services. The factor focuses on staff accountability through the instructional program. It is a program development cluster of questions.

Factor four questions focus on staff development systems and how they enhance the acquisition of knowledge and skills to solve school-wide problems. It is a staff development cluster of questions.

The factorially complex cluster focuses on assessment. The questions deal with using feedback and data bases to measure schooling effects. With the obvious limitations noted in factorial complexity, the cluster is not represented as a unitary factor.

Conclusion

The significance of this study lies in the current focus on school culture and its relationship to school effectiveness (cultural context). As schools begin to consciously implement reforms to improve performance, information regarding the status of the change process is invaluable to administrators and school leaders. Tools such as the SWCP can help generate data to describe how changes in work culture are taking effect following the implementation of new strategies of reform. However, a valid instrument is needed for this assessment. Furthermore, a second-order factor analysis will help researchers identify the higher-order factors that are the areas of generalization across the primary work culture factors. Our study advances research in this area. Thus this second-order factor analysis will help clarify a strategy for school production. Another logical extension of these studies are investigations that focus on the relationship of work culture (as measured on the SWCP) and school outcomes. Such studies are currently in progress.

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Table 1
Descriptive Statistics for the 416 Subjects

Item	M	SD
1	4.13	1.11
2	3.56	1.10
3	4.31	0.65
4	3.13	1.16
5	4.01	0.98
6	4.24	0.81
7	3.91	1.00
8	3.24	1.11
9	3.63	1.04
10	3.24	1.25
11	3.26	1.11
12	3.54	1.07
13	3.61	1.06
14	2.45	1.08
15	3.50	0.91
16	4.17	0.68
17	3.69	1.13
18	3.80	1.11
19	3.81	1.02
20	4.37	0.70
21	4.34	0.77
22	3.91	0.98
23	4.15	0.70
24	3.62	1.09
25	3.20	1.17
26	4.25	0.77
27	3.55	1.14
28	3.81	1.22
29	3.02	1.07
30	3.80	0.92
31	4.29	0.83
32	3.62	1.08
33	3.85	0.93
34	3.35	1.20
35	3.75	1.10
36	3.82	0.97
37	4.17	0.84

(Continued)

Table 1 (Continued)
Descriptive Statistics for the 416 Subjects

Item	M	SD
38	3.88	0.94
39	3.33	1.12
40	2.82	1.13
41	3.07	1.21
42	3.72	1.22
43	3.92	0.88
44	3.21	1.07
45	4.16	0.94
46	3.97	0.92
47	4.03	0.96
48	3.40	1.08
49	3.65	1.10
50	3.08	1.25
51	2.76	1.17
52	3.69	1.07
53	2.55	1.19
54	3.68	1.10
55	3.56	1.15
56	3.28	1.07
57	3.26	1.10
58	3.88	1.03
59	3.99	0.89
60	3.87	0.99

Table 2
Varimax Rotated Factor Pattern Matrix (n=416)

Item No.	Factors											
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	.441	-.060	.150	.239	.179	.106	.431	.182	.180	.213	.012	.208
2	.240	.098	.082	.013	.252	.259	.530	.093	.296	.132	-.156	.212
3	.121	.111	.027	.110	.012	.011	.096	.253	.006	.018	.075	.699
4	.495	.142	.208	-.031	.147	.201	.082	.059	.285	-.016	-.104	.246
5	.378	.050	.211	.144	.231	.224	.285	.017	.131	.185	.226	.253
6	.153	.176	.134	.077	.119	.020	.719	.072	-.012	-.058	-.009	.170
7	.089	.226	-.034	.146	.029	.015	.399	.230	.145	.070	.458	.054
8	.106	.601	.001	.157	.160	.310	.202	.207	.071	-.090	.045	-.099
9	.113	.256	.005	.080	.132	.181	.690	.039	.126	.143	.138	.014
10	.333	.156	.076	.626	.025	.058	.205	.018	.073	-.188	.059	.003
11	.486	.371	.268	.155	.130	.189	.134	.023	.097	-.001	.151	.185
12	.340	.556	.149	.060	.074	-.013	.256	.016	.207	.010	.160	.192
13	.107	.113	.331	.201	.090	.071	.594	.128	-.004	-.145	.060	-.208
14	.474	.340	-.123	.275	120	.169	.095	-.104	.191	-.027	.112	.038
15	.260	.274	-.067	-.018	.371	.271	.045	.364	.000	-.176	-.006	.021
16	.002	.035	.095	.180	.059	.198	.015	.493	.006	-.079	.332	.329
17	.229	.278	.320	.127	.057	.334	.275	.244	.111	.198	-.171	.022
18	.618	.133	.246	.227	.124	.048	.232	.216	.193	-.004	.004	.004
19	.596	-.018	.158	.166	.212	.068	.263	.232	.007	.079	.069	-.021
20	.152	.165	.131	.003	.162	.001	.040	.673	.007	.072	.061	.144
21	.173	.012	.246	.291	.115	-.061	.213	.338	.088	-.353	.101	.132
22	.063	.629	.248	.129	.196	.150	.236	.221	-.046	.078	.100	-.022
23	.081	.306	.035	.121	-.000	-.010	.171	.582	.206	.158	.059	-.063
24	.158	.334	.224	.051	.117	.130	.034	.229	.088	.520	.088	.076
25	.590	.254	.135	.291	-.008	.133	.020	.190	.113	.124	.128	.064
26	.160	.002	.122	.271	.098	.062	.122	.566	.031	.024	.147	.067
27	.096	.223	.216	-.014	.534	.275	.113	.199	.139	.118	.041	-.094
28	.223	.110	.482	.202	.090	.264	.238	.188	.093	.192	.108	-.172
29	516	.104	.326	-.055	.101	.320	-.028	.110	.197	.007	-.019	.027
30	.091	.408	.113	.125	.061	.085	-.013	.409	.225	.239	.055	.145
31	.125	.119	.354	.328	.117	.180	.241	.171	.150	-.021	.180	.078
32	.376	.157	.034	.158	.323	.215	.110	.246	.329	.121	-.057	-.070
33	.089	.054	.051	.027	.089	.066	.017	.176	.056	.025	.784	.058
34	.295	.255	.562	.032	.050	.341	.173	.014	.026	.148	.106	-.016
35	.365	.232	.445	.287	.153	.201	.194	.170	.162	.124	.052	.043
36	.152	.066	-.003	.097	.693	.086	.155	.261	.145	-.026	-.050	.041
37	.276	.039	.104	.406	.244	.104	.201	.301	.041	.339	.014	.134
38	.274	.008	.084	.395	.265	.074	.127	.178	.065	.426	.084	-.072
39	.169	.087	.355	.000	.169	.068	.024	.060	.590	.030	.164	-.129
40	.116	.375	.052	.099	.322	.538	.058	.118	.139	.001	-.053	-.035
41	.337	.234	.317	.067	.069	.630	.111	.029	.014	.024	.111	.102
42	.099	.225	.129	.689	.118	.068	.070	.237	-.029	.036	-.008	-.053
43	.105	.227	.292	.150	.597	-.077	.095	-.013	.091	.203	.107	-.018
44	.226	.094	.588	.099	.156	.184	.017	.092	.285	-.090	-.046	.042

(Continued)

Table 2 (Continued)
Varimax Rotated Factor Pattern Matrix (n=416)

Item No.	Factors											
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
45	.082	.078	.141	.236	.471	.152	.202	-.018	.137	-.036	.200	.350
46	.139	.168	.130	.219	.750	.087	.090	.002	.032	.047	.095	.056
47	.047	.137	.043	.666	.163	.114	.057	.063	.137	.131	-.024	.222
48	.083	.055	.592	.108	.245	.084	.092	.238	.337	.011	.015	.140
49	.147	.219	.421	.266	.123	.173	.250	.069	.230	.226	-.080	.113
50	.140	.178	.035	.128	.169	.188	.154	.051	.631	.223	-.032	.076
51	.133	.054	.177	.091	-.001	.067	-.012	.048	.594	-.211	.072	.123
52	.226	.009	.208	.424	.166	-.185	.010	.067	.200	.213	.024	.117
53	.141	.092	.144	.055	.007	.630	.086	.030	.354	.004	.035	-.020
54	.140	.373	.327	.199	.117	.414	.115	.041	.144	.212	.004	.163
55	.162	.175	.357	-.140	.191	.577	.214	-.042	.112	.191	.113	.150
56	.057	.022	.105	.511	.117	.471	.069	.131	.204	.009	.098	.026
57	.177	.066	.121	.180	.113	.300	.198	.097	.623	.218	.059	-.063
58	.293	.489	.228	.207	.278	.108	.211	.153	.125	.069	.064	.156
59	.062	.572	.156	.147	.271	.244	.091	.145	.140	.129	-.066	.122
60	.448	.052	.138	.162	.198	.112	.298	.173	.219	.239	.176	-.041

Table 3
Rotated Pattern Coefficients for Salient Items (n=416)

	Factor			
Item No.	I	II	III	IV
1	.310	-.116	.147	.219
5	.294	.045	.056	.002
10	.634	-.011	.180	.280
14	.374	.260	.123	.066
17	.451	.131	.030	.251
19	.373	.160	.226	.073
25	.561	.071	.144	-.229
28	.511	-.011	.045	-.056
31	.364	.017	.218	.034
34	.594	.237	-.090	-.155
35	.570	.162	.098	-.041
37	.346	-.179	-.040	.091
38	.337	-.246	-.159	-.059
41	.671	.252	.196	-.051
42	.538	-.103	-.029	.127
47	.468	-.248	-.054	.168
49	.452	.015	-.094	.146
54	.494	.144	-.094	-.004
55	.553	.084	.014	.043
8	.101	.518	.137	.215
12	.045	.460	-.063	.019
22	.058	.509	-.215	.056
27	-.011	.514	.189	-.040
40	.279	.462	.268	.131
43	-.024	.453	-.231	-.144
46	.005	.573	.005	.014
58	.195	.472	-.023	.051
59	.122	.465	-.091	.073
16	-.045	-.060	.478	-.257
20	-.195	.219	.356	-.194
21	.147	.211	.561	.143
26	.085	-.086	.414	-.075
32	.219	.243	.410	.061
48	.237	.211	.365	-.167
50	.075	-.034	.315	.091
51	.132	.088	.695	-.126
57	.252	-.179	.440	.045

(Continued)

Table 3 (Continued)
Rotated Pattern Coefficients for Salient Items (n=416)

	Factor			
Item No.	**I**	**II**	**III**	**IV**
2	.070	.165	.198	.621
6	-.041	.223	-.069	.763
9	-.084	.070	-.108	.613
13	.224	.178	.097	.537
33	-.241	-.055	.243	-.671
52	.240	-.216	-.055	-.322
4	.354	.371	.372	.019
11	.447	.403	.069	-.109
15	-.043	.651	.501	.073
18	.484	.236	.334	.067
24	.113	-.012	-.336	-.314
29	.535	.341	.408	-.225
36	-.193	.549	.387	.202
39	.111	.163	.490	-.331
44	.513	.315	.379	-.163
53	.482	.002	.513	.051
56	.591	-.233	.382	.089

Note -- Salient items were items with pattern coefficients greater in absolute value than 0.30.

APPENDIX 1
SCHOOL WORK CULTURE PROFILE

1. The school administration and the staff identify goals to improve the school each year.
2. The staff development program builds the school's capacity to solve problems.
3. Instructional programs are guided by learning objectives.
4. Work groups (committees, department teams, grade level groups, etc.) are assessed on their contribution to the achievement of a school goals.
5. Data about student achievement, school services and programs are analyzed by the professional staff to aid in identifying school development goals.
6. Staff development programs provide opportunities to learn new knowledge.
7. The readiness level of students is considered when selecting/developing instructional programs.
8. Staff members provide constructive feedback to each other regularly.
9. Staff development programs provide opportunities to practice newly learned skills.
10. Parents participate in identifying school goals.
11. Work groups monitor and revise their work through periodic assessment of the progress made toward goals.
12. Instructional programs are planned cooperatively by the professional staff.
13. Staff development programs are designed to facilitate adult learning.
14. Students have input into school development goals.
15. Individual staff members alter their work patterns in response to feedback.
16. Instructional programs facilitate student mastery of learning objectives.
17. Staff members have opportunities to develop skills for working successfully in a group/team.
18. School evaluation is based on school goals.
19. Tasks are identified for accomplishing school development goals.
20. Classroom organization and activities facilitate student learning.
21. School evaluation includes assessment of student achievement data.
22. Staff members have opportunities to learn by working cooperatively with colleagues.
23. Teachers identify learning expectations for students.
24. School time is structured to provide for cooperative work activity.
25. School evaluation is a cooperatively planned system.
26. Students are provided with reinforcement, correctives, and feedback on their performance.
27. Staff members are supervised and/or coached regularly.
28. Professional staff members are assigned to work in teams.
29. Work groups are assessed on the extent to which work group goals are achieved.
30. Students engage in cooperative learning activities.
31. Professional staff members participate on school-wide task forces and/or committees.
32. Supervision of teaching is based on cooperatively identified goals and emerging needs.
33. Students are provided with sufficient time to succeed in learning tasks.
34. Work groups report periodically on progress to the school leadership team.
35. School-wide task forces and committees work to achieve school development goals.

APPENDIX 1 (Continued)

36. Supervision helps teachers to solve instructional problems.
37. Resources are used to meet school goals.
38. Commonly held beliefs, values and norms are consistent with school development goals.
39. Individual staff members are assessed on the degree to which individual performance goals are achieved.
40. Staff members observe and coach each other.
41. Work group plans are reviewed by the leadership team.
42. Parents serve as a resource to the school's instructional program.
43. Supervision builds and maintains professional self-esteem.
44. Individual staff members are assessed on their contribution to work group goals.
45. High performance expectations exist for each role group (for example: teachers, counselors).
46. Supervision reinforces strengths in current job performance.
47. Community resources are used in the school's instructional programs.
48. Individual staff members are assessed on their contribution to overall school goals.
49. Work group leaders have opportunities to develop specific leadership skills.
50. All staff members develop individual performance goals to contribute to school development goals.
51. Student achievement data are used to assess each teacher's performance.
52. The school's budget reflects prioritized school goals.
53. Each staff member's performance goals are reviewed with the school's leadership team.
54. Staff members share their ideas and concerns for improving work productivity in their work group.
55. The school's leadership team helps work groups to succeed.
56. Periodic feedback from sources outside the school is used to modify work practices.
57. Individual performance goals for staff members are linked to the school's development goals.
58. Staff members problem solve, plan, and make decisions together in productive ways.
59. Staff members function as a resource to each other.
60. Student achievement is assessed in relation to overall school goals.

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